AMENDMENT TO THE SPECIFICATION

At the top of the first page, before the first section, please insert:

-- Cross Reference to Related Applications

This is a continuation of U.S. Patent Application Serial Number 09/746,147, filed 12/22/2000, which is a continuation of U.S. Patent Application Serial Number 09/001,869, filed 12/31/1997, which is a continuation-in-part to U.S. Patent Application Serial Number 09/979,588, filed 11/26/1997. –

Please amend the paragraph beginning at page 58, line 13, as follows:

In a preferred embodiment, the methods of ~~co-pending US patent application Serial No. _____, filed 11/14/97~~ US Patent No. 6,457,032, issued 9/24/2002, entitled "Efficient, Flexible Digital Filtering", and ~~co-pending US patent application Serial No. 08/727,721, filed 10/07/96~~ U.S. Patent No. 6,408,109, issued 6/18/2002, entitled "Apparatus and Method for Detecting and Sub-Pixel Location of Edges in a Digital Image" ~~"Fast, Inexpensive, Subpixel Edge Detection"~~ are used for feature extraction, Cognex Corporation's PatQuick™ tool is used to determine the starting pose, and the multi-resolution style of figure 26 is used. The following parameter settings are used for feature extraction by default. Many other strategies can be devised to suit specific applications.

Please amend the paragraph beginning at page 59, line 2, as follows:

where *w* and *h* are the width and height, respectively, of the pattern **100** in pixels and the *floor* function gives the largest integer that is less than or equal to its argument. Note that sub-sampling by n means taking every n^{th} pixel. The low-pass filter **310** uses a filter size parameter ("s" in ~~co-pending US patent application Serial No. _____, filed 11/14/97~~ U.S. Patent No. 6,457,032, issued 9/24/02, entitled "Efficient Flexible Digital Filtering") equal to one less than the computed sub-sample amount. The Cartesian to polar conversion module **340** multiplies the gradient magnitude values by 2.0 to improve precision at the low end, where most gradient values lie.